Amendments to the Claims

1-18. (canceled)

19. (currently amended) A method of injecting a sample plug into an electrolyte channel in a microfluidics device, comprising the steps of:

placing a sample having a composition of sample components in a sample channel that intersects the electrolyte channel at a supply port,

injecting the sample from the sample channel along a pathway by applying an electric field across the sample channel and a drain channel that intersects the electrolyte channel at ~~to form the sample plug in the electrolyte channel, the pathway comprising the supply port,~~ a drain port ~~intersecting the electrolyte channel at a location~~ axially spaced from the supply port~~,~~ to form the sample plug in the electrolyte channel, said pathway comprising the supply port, the drain port and a segment of the electrolyte channel between the two ports, the sample plug having said composition of sample components, and

electrokinetically moving the sample plug along the electrolyte channel by applying an electric field across a reservoir for an electrolyte buffer at one end of the electrolyte channel and a drain at an opposite end of the electrolyte channel from the reservoir.

20. (currently amended) The method of claim 19, wherein, during said moving, subjecting said supply and drain channels to an electric potential which is different from ~~the~~an electric potential at the reservoir for the electrolyte buffer, thus establishing a potential difference such that the electrolyte buffer is allowed to advance into said sample channel and into said drain channel.

21. (previously presented) The method of claim 20, wherein said potential difference is chosen such that a resultant electric field strength amounts to at least about 0.1 V/cm.